
DRINKING WATER REGULATIONS AND HEALTH ADVISORIES

by

Office of Water
U.S. Environmental Protection Agency
Washington, D.C.
202-260-7571

SAFE DRINKING WATER HOTLINE
1-800-426-4791
Monday thru Friday, 9:00 AM to 5:30 PM EST

May 1995



LEGEND

Abbreviations column descriptions are:

- MCLG - Maximum Contaminant Level Goal. A non-enforceable concentration of a drinking water contaminant that is protective of adverse human health effects and allows an adequate margin of safety.
- MCL - Maximum Contaminant Level. Maximum permissible level of a contaminant in water which is delivered to any user of a public water system.
- RfD - Reference Dose. An estimate of a daily exposure to the human population that is likely to be without appreciable risk of deleterious effects over a lifetime.
- DWEL - Drinking Water Equivalent Level. A lifetime exposure concentration protective of adverse, non-cancer health effects, that assumes all of the exposure to a contaminant is from a drinking water source.

(*) The codes for the Status Reg and Status HA columns are as follows:

- | | | |
|----------|---|------------------------|
| <u>F</u> | - | final |
| <u>D</u> | - | draft |
| <u>L</u> | - | listed for regulation. |
| <u>P</u> | - | proposed |
| <u>T</u> | - | tentative |

Other codes found in the table include the following:

- | | | |
|-----------|---|--|
| <u>NA</u> | - | not applicable |
| <u>PS</u> | - | performance standard 0.5 NTU - 1.0 NTU |
| <u>TT</u> | - | treatment technique |

- - No more than 5% of the samples per month may be positive. For systems collecting fewer than 40 samples/month, no more than 1 sample per month may be positive.

- - guidance

- Large discrepancies between Lifetime and Longer-term HA values may occur because of the Agency's conservative policies, especially with regard to carcinogenicity, relative source contribution, and less than lifetime exposures chronic toxicity testing. These factors can result in a cumulative UF (uncertainty factor) of up to 5 to 5000 when calculating a Lifetime HA.

The scheme for categorizing chemicals according to their carcinogenic potential is as follows: *

Group A: Human carcinogen

Sufficient evidence in epidemiologic studies to support causal association between exposure and cancer

Group B: Probable human carcinogen

Limited evidence in epidemiologic studies (Group B1) and/or sufficient evidence from animal studies (Group B2)

Group C: Possible human carcinogen

Limited evidence from animal studies and inadequate or no data in human

Group D: Not classifiable

Inadequate or no human and animal evidence of carcinogenicity

Group E: No evidence of carcinogenicity for humans

No evidence of carcinogenicity in at least two adequate animal tests in different species or in adequate epidemiologic and animal studies

Drinking Water Health Advisories (HAs) are defined as follows:

One-day HA

The concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to 5 consecutive days of exposure, with a margin of safety.

Ten-day HA

The concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects up to 14 consecutive days of exposure, with a margin of safety.

Long-term HA

The concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects up to approximately 7 years (10% of an individual's lifetime) of exposure, with a margin of safety.

*EPA is in the process of revising the Cancer Guidelines.

Lifetime HA

The concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects over a lifetime of exposure, with a margin of safety.

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Chemicals	Standards			HA	Health Advisories										Cancer Status
	MCLG	MCL	TT		10-kg Child			70-kg Adult							
					One-day (mg/l)	One-day (mg/l)	One-day (mg/l)	Lifetime (mg/l)	ED (mg/l/day)	DMEL (mg/l)	Lifetime (mg/l)	mg/l at 10 ⁻⁶ Cancer Risk			
ORGANICS-															
Acenaphthene	-	-	-	-	-	-	-	-	0.06	-	-	-	-	-	
Acifluorfen	T	zero	-	F	2	2	0.1	0.4	0.013	0.4	-	0.1	B2		
Acrylamide	F	zero	TT	F	1.5	0.3	0.02	0.07	0.002	0.007	-	0.001	B2		
Acrylonitrile	T	zero	-	D	-	-	-	-	-	-	-	0.003	B1		
Adipate (diethylhexyl)	F	0.4	0.4	-	20	20	20	60	0.6	20	0.4	3	C		
Alachlor	F	zero	0.002	F	0.1	0.1	-	-	0.01	0.4	-	0.04	B2		
Aldicarb**	D	0.007	0.007	D	-	-	-	-	0.001	0.035	0.007	-	D		
Aldicarb sulfone**	D	0.007	0.007	D	-	-	-	-	0.001	0.035	0.007	-	D		
Aldicarb sulfonate**	D	0.007	0.007	D	-	-	-	-	0.001	0.035	0.007	-	D		
Aldrin	-	-	-	D	0.0003	0.0003	0.0003	0.0003	0.0003	0.001	-	0.0002	B2		
Ametryn	-	-	-	F	9	9	0.9	3	0.009	0.3	0.06	-	D		
Ammonium sulfate	-	-	-	F	20	20	20	60	0.26	9	2	-	D		
Anthracene (PAH)***	-	-	-	-	-	-	-	-	0.3	-	-	-	D		
Atrazine	F	0.003	0.003	F	0.1	0.1	0.05	0.2	0.035	0.2*	0.003*	-	C		
Baygon	-	-	-	F	0.04	0.04	0.04	0.1	0.004	0.1	0.003	-	C		
Benazox	T	0.02	-	F	0.3	0.3	0.3	0.9	0.0036	0.09	0.02	-	D		
Benz(a)anthracene (PAH)	-	-	-	-	-	-	-	-	-	-	-	-	B2		
Benzene	F	zero	0.005	F	0.2	0.2	-	-	-	-	-	0.1	A		
Benzo(a)pyrene (PAH)	F	zero	0.002	-	-	-	-	-	-	-	-	0.0002	B2*		
Benzo(b)fluoranthene (PAH)	-	-	-	-	-	-	-	-	-	-	-	0.0002	B2		
Benzo(g,h,i)perylene (PAH)	-	-	-	-	-	-	-	-	-	-	-	-	D		
Benzo(k)fluoranthene (PAH)	-	-	-	-	-	-	-	-	-	-	-	0.0002	B2		
bis-2-Chloroisopropyl ether	-	-	-	F	4	4	4	13	0.04	1	0.3	-	D		
Bromacil	L	-	-	F	5	5	5	9	0.13	5	0.09	-	C		
Bromobenzene	L	-	-	D	-	-	-	-	-	-	-	-	-		

* Under review

**NOTE: The HA value or the MCLG/MCL value for any two or more of these three chemicals should remain at 0.007 mg/L because of similar mode of action

***PAH = Polycyclic aromatic hydrocarbon

NOTE Anthracene and Benzo(g,h,i)perylene — not proposed in Phase V

NOTE Changes from the last version are noted in *italic* and **Bold Face** print

Chemicals	THM			THM			THM			THM			Cancer Risk
Bromochloroacetonitrile	L	-	-	D	-	-	-	-	-	-	-	-	-
Bromochloromethane	P	zero	0.1*/0.08	D	8	8	4	13	0.02	0.7	-	0.08	-
Bromodichloromethane (THM)	P	zero	0.1*/0.08	D	8	8	4	13	0.02	0.7	-	0.08	-
Bromoform (THM)	P	zero	0.1*/0.08	D	8	8	4	13	0.02	0.7	-	0.08	-
Bromomethane	T	-	-	F	0.1	0.1	0.1	0.5	0.001	0.04	0.01	-	-
Butyl benzyl phthalate (PAE)**	-	-	-	-	-	-	-	-	-	-	-	-	-
Butylate	-	-	-	F	2	2	1	4	0.05	2	0.35	-	-
Butylbenzene n-	-	-	-	D	-	-	-	-	-	-	-	-	-
Butylbenzene sec-	-	-	-	D	-	-	-	-	-	-	-	-	-
Butylbenzene tert-	-	-	-	D	-	-	-	-	-	-	-	-	-
Carbaryl	-	-	-	F	1	1	1	1	0.1	4	0.7	-	-
Carbofuran	F	0.04	0.04	F	0.05	0.05	0.05	0.5	0.005	0.5	0.04	-	-
Carbon tetrachloride	F	zero	0.005	F	4	0.2	0.07	0.3	0.0007	0.03	-	0.03	-
Carboxin	-	-	-	F	1	1	1	1	0.1	4	0.7	-	-
Chloral hydrate	P	0.04	0.08**	D	7	0.2	0.2	0.6	0.0002	0.08	0.08	-	-
Chloramben	-	-	-	F	0.5	0.5	0.2	0.5	0.015	0.5	0.1	-	-
Chlordane	F	zero	0.002	F	0.08	0.08	-	-	0.00008	0.002	-	0.003	-
Chlorodibromomethane (THM)	P	0.08	0.1*/0.08	D	8	8	4	13	0.02	0.7	0.08	-	-
Chloroethane	L	-	-	D	-	-	-	-	-	-	-	-	-
Chloroform (THM)	P	zero	0.1*/0.08	D	8	8	4	13	0.02	0.7	0.08	-	-
Chloromethane	L	-	-	F	8	0.4	0.4	1	0.004	0.1	0.003	-	-
Chlorophenol (2-)	-	-	-	D	0.05	0.05	0.05	0.2	0.005	0.2	0.04	-	-
p-Chlorophenyl methyl sulfide/sulfone/sulfoxide	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorpyrifos	L	-	-	-	-	-	-	-	-	-	-	-	-
Chlorothalonil	-	-	-	F	0.2	0.2	0.2	0.5	0.015	0.5	-	0.15	-
Chlorotoluene o-	L	-	-	F	2	2	2	7	0.02	0.7	0.1	-	-
Chlorotoluene p-	L	-	-	F	2	2	2	7	0.02	0.7	0.1	-	-
Chlorpyrifos	-	-	-	F	0.03	0.03	0.03	0.1	0.003	0.1	0.02	-	-
Cyanazine	T	0.001	-	D	0.1	0.1	0.02	0.07	0.002	0.07	0.001	-	-

* Current MCL **A HA will not be developed due to insufficient data; a "Database Deficiency Report" has been published.

* 1994 Proposed rule for Disinfectants and Disinfection By-products: Total for all THMs combined cannot exceed the 0.08 level.

Total for all haloacetic acids cannot exceed 0.08 level *PAE = phthalate acid ester

Drinking Water Standards and Health Advisories

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Chemicals	Standards			Status HA	Health Advisories								Cancer Group	
	Status HA	MCLG (mg/L)	MCL (mg/L)		10-kg Child			70-kg Adult						
					One-day (mg/L)	Ten-day (mg/L)	Longer- term (mg/L)	Longer- term (mg/L)	RfD (mg/kg/day)	DWEL (mg/L)	Lifetime (mg/L)	mg/L at 40- Cancer Risk		
Cyanogen chloride	L	-	-	-	-	-	-	-	-	-	-	-	-	-
Cymene p-	-	-	-	D	-	-	-	-	-	-	-	-	-	-
2,4-D	F	0.07	0.07	F	1	0.3	0.1	0.4	0.01	0.4	0.07	-	-	D
DGPA (Dacthal)	L	-	-	F	80	80	8	20	0.5	20	4	-	-	D
Dalepon	F	0.2	0.2	F	3	3	0.3	0.9	0.028	0.9	0.2	-	-	D
Di(2-ethylhexyl)adipate	F	-	-	-	20	20	20	60	0.8	20	0.4	3	-	C
Diazinon	-	-	-	F	0.02	0.02	0.005	0.02	0.00009	0.003	0.0006	-	-	E
Dibromoacetonitrile	L	-	-	D	2	2	2	8	0.05	0.8	0.02	-	-	C
Dibromochloropropane (DBCP)	F	zero	0.0002	F	0.2	0.05	-	-	-	-	-	0.003	-	B2
Dibromomethane	L	-	-	-	-	-	-	-	-	-	-	-	-	D
Dibutyl phthalate (PAE)	-	-	-	-	-	-	-	-	0.1	4	-	-	-	D
Dicamba	L	-	-	F	0.3	0.3	0.3	1	0.02	1	0.2	-	-	D
Dichloroacetaldehyde	L	-	-	D	-	-	-	-	-	-	-	-	-	-
Dichloroacetic acid	D	-	-	D	1	-	1	1	0.004	0.1	-	-	-	B2
Dichloroacetonitrile	L	-	-	D	1	1	0.8	3	0.008	0.3	0.008	-	-	C
Dichlorobenzene	F	0.8	0.8	F	9	9	9	30	0.09	3	0.6	-	-	D
Dichlorobenzene m-	F	0.8	0.8	F	9	9	9	30	0.09	3	0.6	-	-	D
Dichlorobenzene p-	F	0.8	0.8	F	10	10	10	30	0.1	4	0.075	-	-	D
Dichlorodifluoromethane	L	-	-	F	40	40	9	30	0.2	6	1	-	-	D
Dichloroethane (1,1-)	L	-	-	D	-	-	-	-	-	-	-	-	-	-
Dichloroethane (1,2-)	F	zero	0.005	F	0.7	0.7	0.7	2.6	-	-	-	0.04	-	B2
Dichloroethane (1,1-)	F	zero	0.005	F	1	1	1	1	0.008	0.4	0.007	-	-	C
Dichloroethylene (cis-1,2-)	F	0.07	0.07	F	4	3	3	11	0.01	0.4	0.07	-	-	D
Dichloroethylene (trans-1,2-)	F	0.1	0.1	F	20	1	1	10	0.02	0.6	0.1	-	-	D
Dichloromethane	F	zero	0.005	F	10	2	-	-	0.08	2	-	0.5	-	B2
Dichlorophenol (2,4-)	L	-	-	D	0.08	0.08	0.08	0.1	0.003	0.1	0.02	-	-	D
Dichloropropene (1,1-)	-	-	-	D	-	-	-	-	-	-	-	-	-	-
Dichloropropene (1,2-)	F	zero	0.005	F	-	0.08	-	-	-	-	-	0.04	-	B1
Dichloropropene (1,3-)	L	-	-	D	-	-	-	-	-	-	-	-	-	-

* The values for m-dichlorobenzene are based on data for o-dichlorobenzene.

** A quantitative risk estimate has not been determined.

** Total for all haloacetic acids cannot exceed 0.08 level.

Chemicals	L			D			F				Total at 10- Percent Feet
	mg	mg	mg	mg	mg	mg	mg	mg	mg		
Dichloropropene (2,2-)	L	-	-	D	-	-	-	-	-	-	
Dichloropropene (1,1-)	L	-	-	D	-	-	-	-	-	-	
Dichloropropene (1,3-)	T	zero	-	F	0.03	0.03	0.03	0.09	0.0003	0.01	0.02
Dieldrin	-	-	-	F	0.0005	0.0005	0.0005	0.002	0.0005	0.002	0.0002
Diethyl phthalate (PAE)	-	-	-	D	-	-	-	-	0.8	30	5
Diethylene glycol dinitrate	-	-	-	D	-	-	-	-	-	-	-
Diethylhexyl phthalate (PAE)	F	zero	0.008	D	-	-	-	-	0.02	0.7	0.3
Diisopropyl methylphosphonate	-	-	-	F	-	-	-	-	0.002	0.1	0.001
Dimethrin	-	-	-	F	10	10	10	40	0.3	10	2
Dimethyl methylphosphonate	-	-	-	F	-	-	-	-	0.2	7	0.1
Dimethyl phthalate (PAE)	-	-	-	-	-	-	-	-	-	-	-
1,3-Dinitrobenzene	-	-	-	F	0.01	0.01	0.01	0.03	0.001	0.003	0.001
Dinitrotoluene (2,4-)	L	-	-	F	0.00	0.00	0.30	1	0.002	0.1	0.005
Dinitrotoluene (2,6-)	L	-	-	F	0.00	0.00	0.05	1	0.001	0.05	0.005
to 2,6 & 2,4 dinitrotoluene "	-	-	-	-	-	-	-	-	-	-	0.005
Dioxab	F	0.007	0.007	F	0.0	0.0	0.01	0.001	0.001	0.01	0.007
Dioxane p-	-	-	-	F	4	0.4	-	-	-	-	0.7
Diphenylid	-	-	-	F	0.3	0.3	0.3	1	0.00	1	0.3
Diphenylamine	-	-	-	F	1	1	0.3	1	0.03	1	0.2
Diquat	F	0.02	0.02	F	1	1	1	1	0.0001	0.01	0.001
Disulfoton	-	-	-	F	0.01	0.01	0.003	0.009	0.00004	0.001	0.0003
Distane (1,4-)	-	-	-	F	0.4	0.4	0.4	1	0.01	0.4	0.01
Diuron	-	-	-	F	1	1	0.3	0.9	0.002	0.07	0.01
Endosulf	F	0.1	0.1	F	0.8	0.8	0.3	0.9	0.001	0.1	0.1
Endrin	F	0.002	0.002	F	0.02	0.02	0.003	0.01	0.0003	0.01	0.002
Epichlorohydrin	F	zero	11	F	0.1	0.1	0.07	0.07	0.001	0.07	0.4
Ethylbenzene	F	0.7	0.7	F	30	3	1	3	0.1	3	0.7
Ethylene dibromide (EDB)	F	zero	0.00005	F	0.005	0.005	-	-	-	-	0.00004
Ethylene glycol	-	-	-	F	20	6	6	20	2	40	7
ETU	L	-	-	F	0.3	0.3	0.1	0.4	0.00005	0.003	0.03
Fenamiphos	-	-	-	F	0.009	0.009	0.005	0.02	0.00025	0.009	0.002

** tg - technical grade

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Chemicals	Standards			Health Advisory	Health Advisories						Cancer Group		
	MCL	MCLG	REL		10-kg Child			70-kg Adult					
					One-day (mg/d)	One-day (mg)	Lifetime (mg)	Long-term (mg/d)	ARO (mg/d)	OWEL (mg/d)		Lifetime (mg)	mg/L at 10 ⁻⁶ Cancer Risk
Fluometron	-	-	-	-	0.2	2	2.0	0	0.013	0.4	0.09	-	D
Fluorene (PAH)	-	-	-	-	-	-	-	-	0.04	-	-	-	D
Fluorotrichloromethane	L	-	-	F	7	7	3	10	0.3	19	2	-	D
Fog Oil	-	-	-	D	-	-	-	-	-	-	-	-	-
Fenitrothion	-	-	-	F	0.02	0.02	0.02	0.07	0.002	0.07	0.01	-	D
Formaldehyde	D	-	-	D	10	5	5	20	0.15	5	1	-	B1**
Gasoline, unleaded (benzene)	-	-	-	D	-	-	-	-	-	-	0.005	-	-
Glyphosate	F	0.7	0.7	F	20	20	1	1	0.1	4	0.7	-	E
Heptachlor	F	zero	0.0004	F	0.01	0.01	0.005	0.005	0.0005	0.02	-	0.0006	B2
Heptachlor epoxide	F	zero	0.0002	F	0.01	-	0.0001	0.0001	1E-5	0.0004	-	0.0004	B2
Hexachlorobenzene	F	zero	0.0005	F	0.05	0.05	0.05	0.2	0.0008	0.03	-	0.002	B2
Hexachlorobutadiene	T	0.001	-	F	0.3	0.3	0.1	0.4	0.002	0.07	0.001	-	C
Hexachlorocyclopentadiene	F	0.05	0.05	F	-	-	-	-	0.007	0.2	-	-	D
Hexachloroethane	L	-	-	F	5	5	0.1	0.5	0.001	0.04	0.001	-	C
Heptane (n-)	-	-	-	F	10	4	4	10	-	-	-	-	D
Hexazinone	-	-	-	F	3	3	3	9	0.033	1	0.2	-	D
HMX	-	-	-	F	6	6	6	20	0.05	2	0.4	-	D
Indeno(1,2,3-c,d)pyrene (PAH)	-	-	-	D	-	-	-	-	-	-	-	-	B2
Isophorone	L	-	-	F	15	15	15	15	0.2	7	0.1	4	C
Isopropyl methylphosphonate	-	-	-	D	30	30	30	100	0.1	40	0.7	-	D
Isopropylbenzene	-	-	-	D	-	-	-	-	-	-	-	-	-
Lindane	F	0.0002	0.0002	F	1	1	0.03	0.1	0.0003	0.01	0.0002	-	C
Malathion	-	-	-	F	0.2	0.2	0.2	0.8	0.02	0.8	0.2	-	D
Maleic hydrazide	-	-	-	F	10	10	5	20	0.5	20	4	-	D
MCPA	-	-	-	F	0.1	0.1	0.1	0.4	0.0016	0.05	0.01	-	E
Methomyl	L	-	-	F	0.3	0.3	0.3	0.3	0.025	0.9	0.2	-	D
Methoxychlor	F	0.04	0.04	F	0.05	0.05	0.05	0.2	0.005	0.2	0.04	-	D
Methyl ethyl ketone	-	-	-	F	-	-	-	-	-	-	-	-	-
Methyl parathion	-	-	-	F	0.3	0.3	0.03	0.1	0.00025	0.009	0.002	-	D

* Under review

** Carcinogenicity based on inhalation exposure.

Chemical	Exposure	Route	Frequency	Duration	Intensity	Concentration	Frequency	Duration	Intensity	Concentration	Concentration	
Methyl tert butyl ether	L	-	-	D	24	24	3	12	0.03	1.0	0.02-0.3	-
Methachlor	L	-	-	F	1	1	1	1	0.1	0.6	0.07	-
Metribuzin	L	-	-	F	6	6	0.3	6.6	0.013**	0.6	0.1	-
Monochloroacetic acid	L	-	-	D	1	1	1	1	1	1	1	-
Monochlorobenzene	F	0.1	0.1	F	2	2	2	7	0.02	0.7	0.1	-
Naphthalene	L	-	-	F	0.6	0.6	0.1	1	0.004	0.1	0.02	-
Nitrocellulose (non-toxic)	-	-	-	F	-	-	-	-	-	-	-	-
Nitroguandine	L	-	-	F	10	10	10	20	0.1	1	0.1	-
Nitrophenol p-	-	-	-	F	0.8	0.8	0.8	3	0.008	0.3	0.08	-
Oxamyl (Vydate)	F	0.2	0.2	F	0.2	0.2	0.2	1.0	0.0005	0.6	0.1	-
Paraquat	-	-	-	F	0.1	0.1	0.05	0.2	0.0045	0.2	0.03	-
Pentachloroethane	-	-	-	D	1	1	1	1	1	1	1	-
Pentachlorophenol	F	zero	0.001	F	1	0.3	0.3	1	0.03	1	-	0.03
Phenanthrene (PAH)	-	-	-	-	-	-	-	-	-	-	-	-
Phenol	-	-	-	D	8	8	8	20	0.8	20	4	-
Picloram	F	0.6	0.6	F	20	20	0.7	2	0.07	2	0.6	-
Polychlorinated biphenyls (PCBs)	F	zero	0.0005	P	-	-	-	-	-	-	-	0.0005
Prometon	L	-	-	F	0.2	0.2	0.2	0.6	0.015	0.6	0.1	-
Pronamide	-	-	-	F	0.8	0.8	0.8	3	0.075	3	0.05	-
Propachlor	-	-	-	F	0.5	0.5	0.1	0.6	0.013	0.6	0.08	-
Propazine	-	-	-	F	1	1	0.5	2	0.02	0.7	0.01	-
Prophe...	-	-	-	F	5	5	5	20	0.02	0.6	0.1	-
Propylben...	-	-	-	D	-	-	-	-	-	-	-	-
Pyrene (PAH)	-	-	-	-	-	-	-	-	0.05	-	-	-
RDX	-	-	-	F	0.1	0.1	0.1	0.4	0.003	0.1	0.002	0.03
Simazine	F	0.004	0.004	F	0.07	0.07	0.07	0.07	0.005	0.2	0.004	-
Styrene	F	0.1	0.1	F	20	2	2	7	0.2	7	0.1	-
2,4,5-T	L	-	-	F	0.6	0.6	0.6	1	0.013	0.36	0.07	-
2,3,7,8-TCDD (Dioxin)	F	zero	3E-06	F	1E-06	1E-07	1E-08	4E-06	1E-09	4E-06	-	2E-06

* Under review NOTE Phenanthrene — not proposed.

** The RfD for metribuzin was revised Dec. 1994 to 0.013 mg/kg/day. Based on this revised RfD the Lifetime HA would be 0.1 mg/l assuming a 20% relative source contribution for water. This information has not been incorporated in the Health Advisory document.

*** Tentative.

* If the cancer classification C is accepted, the Lifetime HA is 0.20; other wise it is 0.200 mg/L

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Chemicals	Standards			Status	Health Advisories								Cancer Group
	MCL	MCLG	LCL		10-kg Child			70-kg Adult					
					One-day (mg)	Ten-day (mg)	Long-term (mg)	Long-term (mg)	MDL (mg/kg)	DNEL (mg/kg)	Lifetime (mg)	mg/L at 10 ¹ Cancer Risk	
Tebuthiuron	-	-	-	F	3	3	0.7	2	0.07	2	0.5	-	D
Terbacol	-	-	-	F	0.3	0.3	0.3	0.9	0.013	0.4	0.09	-	E
Terbufos	-	-	-	F	0.005	0.005	0.001	0.005	0.00013	0.005	0.0009	-	D
Tetrachloroethane (1,1,1,2-)	L	-	-	F	2	2	0.1	3	0.08	1	0.07	0.1	D
Tetrachloroethane (1,1,2,2-)	L	-	-	D	-	-	-	-	-	-	-	-	-
Tetrachloroethylene	E	zero	0.005	F	2	2	1	5	0.01	0.5	-	0.07	-
Tetrahydrofuran	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	F	1	1	F	20	2	2	7	0.2	7	1	-	D
Toxaphene	F	zero	0.003	F	-	-	-	-	0.1	-	-	0.003	B2
2,4,6-TP	E	0.005	0.005	F	0.3	0.2	0.07	0.3	0.0075	0.3	0.06	-	D
1,1,2-Trichloro-1,2,2-trifluoroethane	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroacetic acid	D	0.1	0.005	D	4	4	4	13	0.1	4.0	0.3	-	D
Trichloroacetonitrile	L	-	-	D	0.05	0.05	-	-	-	-	-	-	-
Trichlorobenzene (1,2,4-)	E	0.02	0.02	F	0.1	0.1	0.1	0.5	0.001	0.04	0.07	-	D
Trichlorobenzene (1,3,5-)	-	-	-	F	0.6	0.6	0.6	2	0.008	0.2	0.04	-	D
Trichloroethane (1,1,1-)	E	0.2	0.2	F	100	40	40	100	0.035	1	0.2	-	D
Trichloroethane (1,1,2-)	F	0.003	0.005	F	0.6	0.4	0.4	1	0.004	0.1	0.003	-	C
Trichloroethanol (2,2,2-)	L	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethylene	F	zero	0.005	F	-	-	-	-	-	0.3	-	0.3	B2
Trichlorophenol (2,4,6-)	L	-	-	D	-	-	-	-	-	-	-	0.3	B2
Trichloropropane (1,1,1-)	-	-	-	D	-	-	-	-	-	-	-	-	-
Trichloropropane (1,2,3-)	L	-	-	F	0.6	0.6	0.6	2	0.008	0.2	0.04	0.6	B2
Trifluralin	L	-	-	F	0.06	0.06	0.06	0.3	0.0075	0.3	0.005	0.5	C
Trimethylbenzene (1,2,4-)	-	-	-	D	-	-	-	-	-	-	-	-	-
Trimethylbenzene (1,3,5-)	-	-	-	D	-	-	-	-	-	-	-	-	-
Trinitroglycerol	-	-	-	F	0.005	0.005	0.005	0.005	-	-	0.005	-	-
Trinitrotoluene	-	-	-	F	0.02	0.02	0.02	0.02	0.0005	0.02	0.002	0.1	C
Vinyl chloride	F	zero	0.002	F	3	3	0.01	0.05	-	-	-	0.0015	A
Xylenes	F	10	10	F	40	40	40	100	2	60	10	-	D

* Under review

** A HA will not be developed due to insufficient data; a "Database Deficiency Report" has been published.

** Total for all haloacetic acids cannot exceed 0.05 mg/L level.

Chemicals	Regulation			Health Hazard	Environmental Criteria			Water Quality Criteria			Cancer Risk	CAS No.
	State Reg.	Fed. Reg.	Other Reg.		Water	Soil	Air	Surface Water	Groundwater	Drinking Water		
INORGANICS												
Aluminum	L	-	-	D	-	-	-	-	-	-	-	-
Ammonia	L	-	-	D	-	-	-	-	-	-	-	D
Antimony	F	0.008	0.008	F	0.01	0.01	0.01	0.015	0.0004	0.01	0.003	D
Arsenic	F	-	0.05	D	-	-	-	-	-	-	0.002	A
Asbestos (fibers/l >10µm length)	F	7 MFL	7 MFL	-	-	-	-	-	-	-	700 MFL	A
Berkium	F	2	2	F	-	-	-	-	0.02	2	-	D
Beryllium	F	0.004	0.004	D	30	30	4	20	0.005	0.2	0.0008	B2
Boron	L	-	-	D	-	0.5	0.1	-	0.05	1	0.5	D
Bromate	L	zero	0.01	-	-	-	-	-	-	-	-	-
Cadmium	F	0.005	0.005	F	0.04	0.04	0.005	0.02	0.005	0.02	0.005	D
Chloramine	P	4***	4	D	1	1	1	1	0.1	3.3	3/4***	-
Chlorate	L	-	-	D	-	-	-	-	-	-	-	-
Chlorine	P	4	4	D	-	-	-	-	0.1	-	-	D
Chlorine dioxide	T	0.3	0.6	D	-	-	-	-	0.01	0.38	0.1	D
Chlorite	L	0.08	1	D	-	-	-	-	0.003	0.1	0.08	D
Chromium (total)	F	0.1	0.1	F	1	1	0.2	0.8	0.005	0.2	0.1	D
Copper (at tap)	F	1.3	1.3**	F	0.1	0.2	0.2	0.8	0.025	0.8	0.2	D
Cyanide	P	0.2	0.2	F	0.1	0.2	0.2	0.8	0.025	0.8	0.2	D
Fluoride*	F	4	4	-	-	-	-	-	0.12	-	-	-
Hypochlorite	P	4 ¹	-	-	-	-	-	-	-	-	-	-
Hypochlorous acid	P	4 ¹	-	-	-	-	-	-	-	-	-	-
Lead (at tap)	F	zero	TT**	-	-	-	-	-	-	-	-	B2
Manganese	L	-	-	D	-	-	-	-	0.14 ²	-	-	-
									0.005 ³	-	-	-
Mercury (inorganic)	F	0.002	0.002	F	-	-	-	0.002	0.0005	0.01	0.002	D
Molybdenum	L	-	-	D	0.04	0.04	0.04	0.05	0.005	0.2	0.04	D
Nickel	F	0.1 ¹	0.1 ¹	F	1	1	0.5	1.7	0.02	0.6	0.1	D
Nitrate (as N)	F	10	10	F	-	10 ²	-	-	1.6	-	-	-

* Under review ** Copper — action level 1.3 mg/L. *** Measured as free chlorine.
Lead — action level 0.015 mg/L.

¹ Regulated as chlorine ² In food ³ In water ⁴ Being remanded

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Chemicals	Drinking Water Standards			Health Advisories	Health Advisories					Cancer Risk		
	F	MCL			70-kg Adult							
		1991 Rule	1991 Rule		1991 Rule	1991 Rule	1991 Rule	1991 Rule	1991 Rule			
Nitrite (as N)	F	1	1	F	-	1*	-	-	0.16*	-	-	-
Nitrate + Nitrite (both as N)	F	10	10	F	-	-	-	-	-	-	-	-
Selenium	F	0.05	0.05	-	-	-	-	-	0.005	-	-	-
Silver	-	-	-	F	0.2	0.2	0.2	0.2	0.005	0.2	0.1	D
Sodium	-	-	-	D	-	-	-	-	-	20**	-	-
Strontium	L	-	-	F	25	25	25	25	0.8	25	17	D
Sulfate	P	500	500	D	-	-	-	-	-	-	-	-
Thallium	F	0.002	0.002	F	0.002	0.002	0.002	0.02	0.00007	0.002	0.0004	-
Vanadium	L	-	-	D	-	-	-	-	-	-	-	D
White phosphorus	-	-	-	-	-	-	-	-	0.0002	0.0005	0.0001	D
Zinc	L	-	-	F	6	6	3	10	0.3	10	2	D
Zinc chloride (measured as Zinc)	L	-	-	F	6	6	3	10	0.3	10	2	D
RADIONUCLIDES												
Beta particle and photon activity (formerly man-made radionuclides)	P	zero	15 pCi/L	-	-	-	-	-	-	-	4 mrem/yr	A
Gross alpha particle activity	P	zero	15 pCi/L	-	-	-	-	-	-	-	15 pCi/L	A
Radium 226	P	zero	20 pCi/L	-	-	-	-	-	-	-	20 pCi/L	A
Radium 228	P	zero	20 pCi/L	-	-	-	-	-	-	-	20 pCi/L	A
Radon	P	zero	300 pCi/L	-	-	-	-	-	-	-	150 pCi/L	A
Uranium	P	zero	20 µg/L	-	-	-	-	-	0.003	-	-	A

* Under review ** Guidance

*1991 Proposed National Primary Drinking Water Rule for Radionuclides

Secondary Maximum Contaminant Levels

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Aluminum	F	0.05 to 0.2
Chloride	F	250
Color	F	15 color units
Copper	F	1.0
Corrosivity	F	non-corrosive
Fluoride	F	2.0
Foaming agents	F	0.5
Iron	F	0.3
Manganese	F	0.05
Odor	F	3 threshold odor numbers
pH	F	6.5 — 8.5
Silver	F	0.1
Sulfate	F	250
Total dissolved solids (TDS)	F	500
Zinc	F	5

Status Codes: P — proposed, F — final

* Under review.

Microbiology

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	Status	MCLG	MCL
Cryptosporidium	L	-	-
Giardia lamblia	F	zero	TT
Legionella	F	zero	TT
Standard Plate Count	F	NA	TT
Total Coliforms	F	zero	**
Turbidity	NA	NA	PS
Viruses	F	zero	TT

Key: PS, TT, F, defined as previously stated.

Final for systems using surface water, also being considered for regulation under groundwater disinfection rule.